

In the specification:

Page 1, line 5, amend as follows:

~~Technical Field~~Background of the Invention

Page 1, line 11, delete the heading "Prior Art".

Page 1, line 21, replace the heading as follows:

~~Depiction of the Invention~~Summary of the Invention

Page 1, amend the paragraph in lines 24-29 as follows:

The object of the invention is to disclose an antenna array of the type mentioned at the beginning, which can be produced using LTCC technology (Low Temperature Cofired Ceramics) and achieves a favorable antenna efficiency in a planar design. This object is attained by ~~means of the features disclosed in claim 1. Advantageous embodiments and modifications of the invention are characterized in the dependent claims~~the planar antenna array which is designed in accordance with the present invention.

Page 2, amend the paragraph in lines 13-17 as follows:

~~According to claim 2, it~~ is advantageously possible for the feeder lines and the coupling slots to be surrounded at a fixed distance by plated-through contacts, the distance being smaller than a critical distance at which waveguide modes form. This shielding makes it possible to nail down, so to speak, the lines for the radiation.

Page 2, amend the paragraph in lines 19-21 as follows:

~~According to the feature of claim 3, it~~ is preferable if the fixed distance lies in the range from approx.  $0.01 * \lambda$  to approx.  $0.1 * \lambda$ , where  $\lambda$  is the wavelength of the microwave radiation emitted.

Page 2, amend the paragraph in lines 23-25 as follows:

According to the advantageous modification ~~in claim 4~~, each coupling slot is enclosed by a single-row arrangement of plated-through contacts.

Page 2, amend the paragraph in lines 26-30 as follows:

Alternatively, ~~according to claim 5,~~ each coupling slot can be enclosed by a double-row arrangement of plated-through contacts. The two rows can be aligned with each other or offset from each other. Naturally, other forms such as triple-row, quadruple-row, or n-row arrays are also possible, but require a greater area.

Page 3, amend the paragraph in lines 1-5 as follows:

~~According to the feature of claim 6, the~~The distance of the coupling slots from the end of the resonator is essentially  $(2n-1) * \lambda/4$ , where  $\lambda$  is the wavelength of the emitted microwave radiation and n is a natural number. In the simplest case, the distance of the coupling slots from the end of the resonator is approximately  $\lambda/4$ , with  $n = 1$ .

Page 3, amend the paragraph in lines 7-10 as follows:

~~According to claim 7, the~~The distance of the coupling slots from the back wall is essentially  $2n * \lambda/4$ , where  $\lambda$  is the wavelength of the microwave radiation emitted and n is a natural number. In the simplest case, the distance of the coupling slots from the back wall is approximately  $\lambda/2$ , with  $n = 1$ .

Page 3, amend the paragraph in lines 12-18 as follows:

In the advantageous embodiment ~~according to claim 8~~, the plated-through contacts enclose the coupling slots along an essentially rectangular perimeter line. The distance of the coupling slots from the edge of the plated-through contacts perpendicular to the slot direction is preferably essentially  $2n * \lambda/4$ , where  $\lambda$  is the wavelength of the microwave radiation emitted and  $n$  is a natural number. Here, too, in the simplest case, the distance is approximately  $\lambda/2$ , with  $n = 1$ .

Page 3, amend the paragraph in lines 27-29 as follows:

In order to reflect the laterally straying energy back to the coupling slots, ~~according to claim 10~~, the plated-through contacts enclose the coupling slots along a perimeter line with rounded corners.

Page 4, amend the paragraph in lines 1-3 as follows:

In order to increase the inhibiting action, ~~according to claim 11~~, two rows of plated-through contacts are spaced apart from each other by the distance of half a wavelength.

Page 4, amend line 29 as follows:

~~Best Way to Embody the Invention~~  
Description of the Preferred Embodiments